SFWMD
Invasive Animal Search Team
Identification

Skip Snow
21 July 2009
What to look for in a giant snake

If you see a large or heavy bodied exotic snake in Florida it is most likely one of the following (in order of increasing size)
**Ball python**

- Up to about 7’ in total length
- Rarely exceeds 6’ in total length but can be extremely fat
- Round light colored body markings on a dark background
- Dark arrowhead on the top of the head
Ball python in the “wild”

- Crawling under the porch of a vacation home in Daytona Beach (July 2009)
Boa constrictor

- Up to almost 15’
- A variety of color patterns
- Most have a recognizable dark line or wedge on the top of the head
- Large ovals, progressively lighter towards the tail
- Between ovals are darker saddle-shaped blotches that extend down the side
- Blotches can become progressively more red towards the tail
Boa from Deering Estate at Cutler
11 July 2006
Boa constrictor in the “wild”
Burmese python

- Up to about 25’
- Network of dark blotches on backs and sides (like the pattern on a giraffe).
- Blotches are irregular, NOT net-like, diamond-shaped, or round.
- Dark arrowhead on top of the head.
- Not as pudgy as Ball Pythons.
Burmese python in the wild

• On the side of the Main Park Road (S.R. 9336) near Flamingo, Everglades National Park
Albino Burmese python on the loose

• Feral albino Burmese python eating a squirrel in a Fort Myers backyard, 5 October 2006.
African rock pythons

- Up to about 25’ in total length
- Burmese and African Rock Pythons share many characters.
- Often indistinguishable without having the snake in hand
- Very few records in South Florida
African rock pythons
Reticulated python

- Up to 30’ in total length
- Longer and more slender
- Thin dark longitudinal line on the top of a light-colored head
- Conspicuous red iris
- Body markings complex, forming a network (like a fishing net)
- Upper sides of the body tend to have distinct white markings
Reticulated python in the wild

Observed December 1997 on Research Road, ENP
Green anaconda

- Up to “only” 24’ but heavier than pythons
- Only species with black circular marks on a plain greenish-brown body
- Black marks usually solid rather than ring-like
- Can be extremely fat for its length*
- Rarely seen far from water
- Usually no marks on the top of the head

*USGS
Yellow anaconda

- Up to 12.5’
- Smaller than the Green Anaconda
- Yellow ground color with many black dorsal blotches and smaller blotches on the sides
- 5 dark head stripes (Green Anaconda has only 4)
Yellow anaconda in the “wild”

A feral yellow anaconda was collected on Loop Road, BICY, in Jan of 2007.
Monitors

Nile monitor

Photo by Todd Campbell
Similar native species

- No heavy bodied native snakes > 8’
- Endangered eastern indigo can get long, ave. adult 5’ - 6’ (but no pattern)
- Eastern diamondbacks are heavy bodied but rarely exceed 8’
- Most misidentification is with small snakes < 3’ - 4’

Photo by Kenneth Krysko

Photo by Kenneth Wray
Water snake and Burmese python
Other similar native species

• Corn snake
• Florida cottonmouth

Photos by Mike Rochford, University of Florida
If you live in Florida and you would like to know more about the snake you found in your backyard, or in your swimming pool, or the one you saw in the pine flatwoods, or crossing the road, this Guide will answer your questions. It is the best online source of information about Florida snakes:

- What species are found in Florida?
- Where in Florida?
- How can I identify them — safely?
- Will they bite?
- Are they venomous?
- What do they look like?
- Where do they live?
- What do they eat?
- How big do they grow?
- How can I safely remove snakes from my yard?

www.flmnh.ufl.edu/herpetology/FL-GUIDE/onlineguide.htm
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Visual Searching

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The python has much in its favor

• Very cryptic, blend well with environment
• Sit and wait predator, movement can be limited
• Low visibility and inaccessible environments (inundation, dense low-level vegetation, and private property)
• Only a small fraction (0.1-5%) of pythons present in the wild are probably detected
• Direct searching is the most widely used tool for locating reptiles
• Effective traps or toxicants have not yet been developed for these target non-native species
Just where is Waldo?
In the right time and place

Estimated 15’ Burmese python observed on Main Park Road, ENP
Where do I look?

Burmese python on the Old Ingrahm Highway canal, March 2009
Aerial view of the L-67 Extension canal

L-67 levy road
Retention Areas
Tamiami Trail (US 41)
33 miles west of Miami
5000 vehicles per day

In four months 32 pythons, 6.4 per mile, about 826 pounds.
Marginal habitat?

C-103 and C-113 canals
How do I look?

- Safely
- Slow speed ~ 5 mph
- Observer windows open
- Minimize distractions
- Scan the likely habitat
- The more eyes the better
When do I look?

Python Observations and Captures

Sunset

Sunrise
What do I look for?

- Stacked Coil
- Loose Coil
- Swimming/In Water
- Outstretched (not moving)
- Outstretched (moving)
- Two or More Snakes Together
- Other
Stacked coil
More than a single layer of coiling, with the head resting on the body in an ambush posture, snout visible

Compact coil
More than a single layer of coiling, so that body surface exposure is reduced, head concealed/buried in coils so snout is not visible.

Burmese python on the L-29 canal bank, 21 Nov 2008 (PyMo 1016)
Loose Coil

Any coiled posture where there is little or no contact between different parts of the python’s body.

Burmese python basking in a loose coil December 2008.
Swimming
Observed moving in water.

Near Taylor Slough airboat launch, ENP.
In Water/Stationary
Either partially or fully in water but not moving

Burmese python seen resting in water in Watson River, March 2009
Outstretched
A linear posture but generally not moving.

Burmese python at night on the Main Park Road, ENP, March 2009
Outstretched and Moving

Snake seen traveling across a road for example

Burmese python at night on the Main Park Road, ENP, March 2009
Two or more snakes together

Note the estimated distance between the snakes and if in contact with each other try and describe how the snakes are oriented, etc., although this can be difficult to sort out!

Three or more Burmese pythons in a mating ball on the L-29 canal bank, March 2008.
Burmese python making use of a tree hole along the Harney River, ENP.
Burmese python being extracted from a visitor’s motor vehicle, ENP.
Finding nests

Extremely hard to find active nests without the aid of radio tracking. However, if you observe a large python using a hole in April – June, it may be a nesting female.
Egg shells

Egg shells from a hatched nest found 31 Jan 2009, on the L-29 canal bank under old foam bedding.
Signs of use

- Look for areas of matted down vegetation, ferns, cattails, and sawgrass.
- This might be from a python repeatedly basking in the same spot.
- Can be over water.
Tracks

- Not to be confused with:
  - Alligator
  - Gopher tortoise
  - Crab
  - Bicycle tire

Track left in the mud by a radio tagged python, ENP.
Holes

India

L-67 Ext.

A hole used by more than one python in the Winter
Floaters and Road kill

Found dead in L-29 canal Jan 2008

Road kill on Park road, ENP
Fire and Mowers

Python Found dead after a burn in the Hole-in-the-Donut

Mower killed python in S-332 retention area
Farmers

vultures are our friends
Python Mirages

Dead tree branches
Trash (shiny, linear)
Retreads
Rope
Flexible pipe
Estimating Snake Length

Obtain some reference lengths
• Road width
• Levee width
• Mowed road shoulder
• Vehicle width and length
• Known length of rope, flex pipe, or fire hose
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